Amendments to the Specification:

Please amend the paragraph that begins on page 2, line 13 as follows:

According to the teachings of the present invention there is provided, a rotary variable-volume machine comprising: (a) at least one piston element; (b) a piston mechanism configured to move the piston element in a motion that is simultaneous orbital motion about a primary axis and rotation about a secondary axis that passes through the piston element, such that the piston element sweeps out an annular path of variable cross-section, said piston mechanism including at least one rotor configured so as to rotate about said primary axis of rotation, said rotor being at least partially deployed within said modified toroidal operational volume, said at least one piston element being deployed on said rotor; (c) ~~a~~ at least a first and a second stator portions ~~housing~~ containing between them a modified toroidal operational volume, the modified toroidal operational volume defined by the annular path, such that the side piston element moves through the modified toroidal operational volume, the piston element contacting walls of the modified toroidal operational volume; (d) at least one inlet opening through the stator housing into the modified toroidal operational volume; and (e) at least one outlet opening through the stator housing from the modified toroidal operational volume; wherein said rotor is at least partially deployed within said modified toroidal operational volume, said rotor and said at least one piston element passing between said at least first and second stator portions.

Please amend the paragraph that begins on page 3,line 4 as follows:

According to a further teaching of the present invention the piston mechanism includes: (f) a main shaft deployed in the stator housing, the main shaft mechanically linked to said rotor and configured so as to rotate about the primary axis~~; and (g) at least one rotor mechanically linked to the main shaft so as to rotate about the primary~~

~~axis of rotation, the rotor being at least partially deployed within the modified toroidal operational volume, the at least one piston element being deployed on the rotor~~.

Please cancel the last paragraph on page 3.

~~According to a further teaching of the present invention the at least one inlet opening is configured proximally to the seal area in a direction of rotation, and the at least one outlet opening is configured distal to the seal area in a direction of rotation.~~

Please amend the first paragraph on page 4 as follows:

According to a further teaching of the present invention a ratio of piston rotation to rotor rotation is 1:2~~, therefore the at one inlet, the at least one outlet and the seal area is implemented as one inlet, one outlet and one seal area~~.

Please amend the paragraph that begins on page 4, line 4 as follows:

According to a further teaching of the present invention the secondary axis of rotation is perpendicular to the primary axis, and said at least a first and a second stator portions are implemented as two opposing stator housing shell halves.

Please amend the paragraph that begins on page 4, line 10 as follows:

According to a further teaching of the present invention, ~~each of said pair of~~ said at least one piston elements is attached to ~~opposite~~ an ends of a rotatable ~~axel~~axle lying on said secondary axis, rotation of said ~~axel~~axle affected by interaction between a first gear affixed to said ~~axel~~axle and second gear statically affixed to said stator housing, such that rotation of said main shaft causes rotation of said ~~axel~~axle

Please amend the paragraph that begins on page 4, line 17 as follows:

According to a further teaching of the present invention the secondary axis of rotation is implemented as at least a second ~~and a third axes~~ axis of rotation, ~~both of~~ which ~~are~~ is parallel to the primary axis, such that ~~each one of the pair of~~ the at least

one piston elements rotates about ~~a corresponding one of~~ the second ~~and third~~ ~~axes~~axis of rotation.

Please amend the paragraph that begins on page 5, line 1 as follows:

According to a further teaching of the present invention, the rotor is implemented as a cylinder deployed within the modified toroidal operational volume, the cylinder configured so as to rotate about the inner stator element and the main shaft, the second ~~and third axes~~ axis lying substantially in the rotor

Please amend the paragraph that begins on page 5, line 5 as follows:

According to a further teaching of the present invention, ~~each one of said pair of~~ the at least one piston elements is attached to a ~~corresponding~~ rotatable ~~axel~~axle, ~~each corresponding axel~~ said axle therefore lying on ~~one of~~ the second ~~and third axes~~ axis of rotation, rotation of the ~~axels~~ axle affected by interaction between a first gear statically affixed to the stator housing and at least a second ~~and third~~ gears ~~each~~ affixed to ~~corresponding ones of~~the second ~~and third axels~~ axle, such that rotation of the main shaft causes rotation of the ~~axels~~ axle and said rotor.

Please amend the paragraph that begins on page 5, line 12 as follows:

According to a further teaching of the present invention, ~~each~~ the piston element is implemented with a substantially rectangular outer contour.

Please cancel the paragraph that begins on page 5, line 14.

~~According to a further teaching of the present invention the machine of the present invention is implemented as an internal combustion engine further comprising an injector for injecting a combustible mixture into the inlet.~~

Please cancel the paragraph that begins on page 5, line 17.

~~According to a further teaching of the present invention the injector is a second such machine.~~

Please amend page 6, line 1 as follows:

FIG. 1 is [[an]] a transparent exploded view of a first embodiment of a variable-volume...

On page 6, between lines 3 and 4, please insert the following phrase:

FIG. 1a is an opaque exploded view of the embodiment of FIG. 1;

Please cancel page 6, lines 5-7, regarding Fig. 3.

~~FIG. 3 is a top cut-way view of two machines of FIG. 1, illustrating the interconnection of two such machine implemented as an internal combustion engine~~

Please amend the sentence that begins on page 6, line 13 as follows:

The present invention is a variable-volume rotary machine.

Please amend the sentence that begins on page 6, line14 as follows:

The principles and operation of a variable-volume rotary machine according to the present invention may be better understood with reference to the drawings and the accompanying description.

Please amend the sentence that begins on page 7,line 5 as follows:

The term "fluids" is used herein to refer to any fluid whether ~~is~~ in a gaseous or liquid state.

Please amend the sentence that begins on page 7, line 21 as follows:

The stator containing the modified toroidal operating volume of this embodiment of the present invention is configured as two opposing stator housing shell halves **11** ~~**10**~~ and **12.**

Please amend the sentence that bridges pages 7 and 8 as follows:

Deployed within the toroidal operating volume **8**, is a main rotor **20**, preferably configured as a disc, mounted on a rotor shaft **22**, which rotates about the primary axis, which defines the modified toroid.

Please amend page 8, lines 10-15 as follows:

...of a common rotatable ~~axel~~ axle **6** that lies on the second axis of rotation. The common rotatable axle ~~axel~~ **6** passes through the rotor shaft, and affixed to it is a conical drive gear **44**, which in turn meshes with a static gear **46** that is fixedly attached to the stator housing. Therefore, as the main rotor rotates about the primary axis of rotation, the force of rotation causes the common rotatable axle ~~axel~~ **6** to rotate about the second axis of rotation. It should be noted that common rotatable axle~~axel~~ **6** may also be implemented as...

Please amend the sentence that begins on page 8, line 19 as follows:

Therefore there is one seal region ~~area~~ and one inlet and one outlet.

Please amend the sentence that begins on page 8, line 21 as follows:

Therefore, any structural changes necessary to accommodate such a gear ratio are within the scope of the present invention ~~such a machine will include two seal areas located at 180° from each other, and two sets of associated inlets and outlets~~.

Please amend the sentence that begins on page 9, line 4 as follows:

There are therefore, areas **42** and **40** [[**44**]] where the surfaces of the stator housing[[s]] shell halves **11** and **12** contact the surface of the rotor and/or the piston, thereby creating a seal region ~~area~~ or barrier through which any fluids held in the modified toroidal operational volume can not pass.

Please amend the sentence that begins on Page 9, line 20 as follows:

As rotation continues, the fluid is pushed out through the outlet opening **32**.

Please amend the sentence that begins on page 10, line 6 as follows:

The piston elements **204** and **206** rotate about secondary axes **208** and **210** respectively, thereby providing a second and third axes of rotation in this embodiment of the present invention.

Please amend the sentence that begins on page 11, line 5 as follows:

Therefore, at seal region ~~area~~ **264** the rotor is rotated to an orientation such that the piston element lies substantially inside the rotor. In this area both the inner and outer stators come in contact with the rotor, and/or piston element as it passes through the area, thereby creating a seal or barrier through which fluids are unable to pass.

Please amend the sentence that bridges pages 11 and 12 as follows:

As the second piston element passes the seal region ~~area~~ **264**, the fluid that entered the toroidal chamber through the inlet opening **250** is now trapped between the two piston elements.

Please amend the sentence that begins on page 12, line 4 as follows

At this point, fluid is then drawn in to the toroidal chamber through the inlet opening **250** as the volume between the piston element and the seal region ~~area~~ **264** increases as the piston element moves through the annular path of the toroidal chamber.

Please amend the sentence that begins on page 12, line 2 as follows:

As rotation continues, the first piston element passes through the seal region ~~area~~ **264** and the fluid is now trapped between the second piston element and the seal region ~~seat~~ **264**, which now acts as a compression barrier

Please amend the sentence that begins on page 12, line 4 as follows:

As rotation continues, the fluid is pushed out though the outlet opening **252.**

Please cancel the sentence that begins on page 13, line 2.

~~Therefore, such a machine will include two seal areas located at 180° from each other, and two sets of associated inlets and outlets.~~

Please amend the sentence that begins on page 13, line 11 as follows:

The seats of a Farris Wheel appear not to rotate, in actuality the seats rotate in relation to the wheel at a ratio of 1:1 in a direction opposite to the direction of wheel rotation.

Please amend page 13, line 17 as follows:

"It will be appreciated that~~, as illustrated in Figure 3,~~ two such machines..."

Throughout the application, please replace the misspelled words "axel" and "axels" with the correct words "axle" and "axles" in the following locations:

Page 4, lines 11-14; page 5, lines 6-11; page 8, lines 10, and 14-16; and page 10, line 11.